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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,317	03/09/2006	Eiji Honda	Q93199	8365

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EXAMINER	
BOYLE, ROBERT C	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
02/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/571,317	HONDA ET AL.	
	Examiner	Art Unit	
	ROBERT C. BOYLE	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *1-8 and 16-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-15* is/are rejected.

7)☐ Claim(s) ____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/13/2008, 12/18/2006, 06/09/2006, 03/09/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention II, claims 9-15, in the reply filed on February 13, 2009 is acknowledged. Claims 1-8 and 16-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected methods and products, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on February 13, 2009.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 9, 12-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Curtin et al., U.S. Patent 6,150,426.

4. It is noted that while claims 9-15 claim a fluoropolymer, all elected claims are recited in the product-by-process format by use of the language, "A stabilized fluoropolymer obtained via polymerization…" Case law holds that:

> Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

5. To the extent that the process limitations in a product-by-process claim do not carry weight absent a showing of criticality, the reference discloses the claimed product in the sense that the prior art product structure is seen to be no different from that indicated in the claims.

6. As to claim 9, Curtin teaches copolymers of tetrafluoroethylene ("TFE") and a perfluoronated vinyl ether CF_2=CF-O-$CF_2CF_2SO_2F$ ("B") (column 3, lines 49-63; column 4, lines 22-50). Curtin does not teach the ratio of IR peaks recited in claim 9. However, as the polymers taught by Curtin do not have any carboxyl groups, the intensity ratio between the carboxyl group IR peak and the CF_2 IR peak is 0, which is less than 0.05 (column 6, lines 49-65; column 12, lines 43-50).

7. Alternatively, the presently claimed ratio of IR peaks would obviously have been present in the fluoropolymer of Curtin.

8. Claims 12-14 add no structural differences to the fluoropolymer of claim 9. Curtin teaches the same fluoropolymer (column 4, lines 22-50).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtin in view of Schreyer, U.S. Patent 3,085,083. The discussion with respect to Curtin as set forth in paragraphs 2-8 above is incorporated here by reference.

11. Claims 10 and 11 recite product-by-process language (see above discussion).

12. As to claim 10, Curtin does not teach that the $-CF_2-$ to $-CF_3$ endgroup ratio is not smaller than $1x10^5$ to 10. Schreyer teaches stabilized fluoropolymers where the main chain carbon to end-group CF_2H group is 84 (column 5, line 60-column 6, line 65). One of ordinary skill in the art would have found it obvious that a fluorine atom could be used to replace the hydrogen atom of Schreyer, in the context of a hydrolyzed perfluorinated polymer which is taught by Curtin (Curtin: column 3, lines 49-63; column 6, lines 49-65; column 12, lines 43-50).

13. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the fluoropolymer in Curtin with the number of fluorinated methyl end-groups taught in Schreyer because Curtin teaches perfluorinated polymers with no C-H bonds and low equivalent weights with high ion exchange ratios which correspond to lower molecular weights (Curtin: column 3, lines 49-63; column 4, lines 22-67; column 5, lines 1-14; column 6, lines 49-65) and Schreyer teaches additional fluorinated methyl end-groups add stability give improved corrosion resistance (Schreyer: column 1, line 15-column 2, line 72; table IV). Therefore, the invention as a

whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

14. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtin in view of Hasegawa et al., WIPO Publication 02/096983. For translation purposes, the national stage entry of Hasegawa, US 2004/0242708, will be cited to.

15. As to claim 15, Curtin does not teach the melt index values. Hasegawa teaches fluoropolymers with pendant SO_3H groups formed by emulsion polymerization that have melt indexes of 10 or less (abstract; paragraphs 0033-35, 0039-41, 0107-114).

16. It would have been obvious to apply the melt indexes taught by Hasegawa to the fluoropolymer taught by Curtin because both Curtin and Hasegawa teach fluoropolymers of tetrafluoroethylene and sulfonated vinyl ethers and one of ordinary skill in the art would recognize the melt index is a measurement of viscosity and an optimum viscosity assists in the prossessing of the polymer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT C. BOYLE whose telephone number is (571)270-7347. The examiner can normally be reached on Monday-Friday, 9:00AM-5:00PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. C. B./
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796